

Critical Practice Study of Nursing Evaluated by Teachers

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Abstract

Purpose: Competent nursing care is essential to positive patient outcomes and quality patient care. Graduate nurses begin practice as novices in knowledge and experience often entering an environment where patients have several disease processes complicating their care. A strong foundation of educational competencies prior to entering practice is vital for the development and growth of graduate nurses into the role of RN. The purpose of this study was to examine the use of the Nurse Competence Scale among nursing faculty.

Method: Nursing faculty were surveyed to determine which competencies were a priority in nursing practice. The Nurse Competence Scale was used to identify and categorize nurse competences. Brenners novice to expert theoretical framework was used to apply findings to curricular programs. IRB approval was granted from each educational institution. SPSS statistical analysis was used to analyze survey results.

Results: Among the categories of the Nurse Competence Scale, nursing faculty identified Acting appropriately in life-threatening situations in the Managing Situations section as most important to practice. In the category of Helping, Planning patient care according to individual needs was identified as most important. Additionally the nursing faculty surveyed rated Contributing to further development of multidisciplinary clinical paths in the Therapeutic Interventions category as the lowest.

Conclusion: This study contributes to the discussion on nursing competence. Priorities for nursing faculty aligned with register nurses in practice. This study helps pair nursing education with practice in several ways including aligning current practice with

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education. Nurse Educators may use these findings to help join curricular outcomes with practice. Evaluating each item on the Nurse Competence Scale using the critical to practice scale provides insight to the necessary skills and knowledge needed to be competent in nursing. In addition the results may be compared to current practice guidelines to ensure best practice. Further research linking education and practice using nursing competence is needed.

Keywords: VET, Vocational Education and Training, Nursing Competence, Nursing Education, Practice Education Gap, International Nursing

1 Introduction

The United States utilizes multiple ways of establishing and evaluating competence in nursing. Professional organizations, accreditation agencies, and government agencies have published standards and criteria identified as essential to nursing (Accreditation Commission for Nursing Education, 2014; American Nurses Association, 2015; National League for Nursing, 2016; Quality and Safety Education for Nurses Institute, 2014). Initially these standards start in nursing programs and continue into practice. While nursing program guidelines reflect curriculum, student and teacher resources, financial resources, and program outcomes, practice standards include ethical decision-making, patient outcomes, and quality of practice (American Nurses Association, 2015).

Despite having these standards in place, nursing managers and preceptors indicate graduate nurses are not competent to enter practice (Lindfors & Junttila, 2014). In a 2009 study by Hickey (2009), preceptors reported that newly graduated nurses were weak in the following areas: (a) psychomotor skills, (b) assessment skills, (c) critical thinking, (d) time management, (e) communication, and (f) teamwork. Other studies support Hickey's findings, indicating that new graduates lacked organizational, time management and communication skills (Dyess & Sherman, 2009; Lindfors & Junttila, 2014); newly licensed nurses failed to recognize life-threatening complications (NCSBN, 2009) and did not demonstrate competence (Lima, Newall, Kinney, Jordan, & Hamilton, 2014). This underscores the transition of a nurse from novice to expert.

Identifying nursing competencies would help transition newly graduated nurses to practice. Identifying competencies to focus on in pre-licensure and ongoing training activities would focus the knowledge base, helping to identify important concepts. By focusing on these competencies in nursing school, the graduate nurse may be able to start build better understanding and competence prior to entering practice. This will aid in the knowledge to expert, a journey all nurses travel through as they become expert clinicians. In addition sharing these competencies with students will help the process of extracting and dismissing extraneous information to focus on.

The Nurse Competence Scale, designed by Meretoja (Meretoja, Isoaho, & Leino-Kilpi, 2004) identified overall competencies nurses used in practice. Using interrater reliability and peer review, the Nurse competence scale has been administered in many different countries, including countries in Europe and the Middle East, as well as Australia

(Meretoja, Isoaho, & Leino-Kilpi, 2004; O’Leary, 2012; Wangenstein, Johansson, Bjorkstrom, & Nordström, 2012) with the goal of assessing the overall competence of practicing nurses. Previous studies have shown the NCS to have better reliability than other tools. Applying the NCS to graduate nurses, rather than practice nurses, may help build the competencies needed to be successful in the role of a nurse.

The purpose of this study was to investigate what are critical nursing skills evaluated by nursing teachers. This study is a brief version of the authors completed doctoral thesis. The study searched the answers to the following research questions:

- 1 What skills on the Nurse Competence Scale (NCS) were most frequently used by nursing teachers?
- 2 What skills on the NCS were rated by teachers as most critical for practice?

2 Background and Literature Review

It has previously been shown nursing competence is related to safe quality nursing care (Aiken, Clarke, Cheung, Slone, & Silber, 2003). For the purposes of this paper competence is defined as “*The ability to perform a task with desirable outcomes under the varied circumstances of the real world*” (Benner, 2001, p. 302). The ability to critically think is essential in nursing in order to solve problems, implement interventions, and evaluate the effectiveness of those interventions (Tanner, 2006). Performance of essential skills is fundamental to competence. This outcome based approach is often appraised in the accreditation process and is evident in professional standards (ACEN, 2014; ANA, 2015; NLN, 2016). The driving forces behind evidence-based practice in nursing are often outcome based (ANA, 2015; NLN, 2013; QSEN Institute, 2014).

If an individual is evaluated to be competent, one is often described as having superior job performance (McMullan et al., 2003). Mustard (2002) also identified competence as the performance of skills needed to meet established standards of care. Competence does not end at the ability to perform skills but also encompasses the knowing how and when to perform the needed skills. Nurses must be able to apply essential skills to different situations as well as anticipate potential complications. Further studies identify competence as skills and actions, indicating it is not enough to know how; one must also know when to act (Dunn et al., 2000).

The knowledge, skills and behaviors that encompass competency are developed in nursing education programs and built upon throughout an individual’s nursing career. It is essential that these basic competencies are established prior to entering the workforce in order to ensure safe, quality care for the public (NCSBN, 2014). However the discord between workforce and academic practice has been a long-standing issue.

In further studying competence, Eraut and du Boulay (1999) found a distinction between the expectation of an employer and the characteristics of an individual. Evidence of this is demonstrated in the different expectations of graduate nurses, academic professionals and employers. This creates a gap in the expected knowledge and skills levels for

new graduates as they make the transition from academic nurse to workforce professional.

Theoretical Basis

Benner's (1984) theory, From Novice to Expert, served as the theoretical framework for this study. Benner's theory describes the cognitive shifts and subsequent nursing interventions in new graduate nurses as well as the professional nurses' growth in competence as his or her career progresses. According to Benner's theory, the graduate nurse, or novice, moves through five stages of development that culminate at the level of expert who, by education and experience, can automatically eliminate extraneous information to focus on holistic patient care with ease. These stages consist of the following: (1) novice, (2) advanced beginner, (3) competence, (4) proficient, and (5) expert (Benner, 1984). Each individual nurse passes through these stages at their own pace and, therefore, there is no specified amount of time spent in each stage.

Benner's model involves cognitive and psychomotor skills requiring the nurse to possess abstract thinking and apply clinical judgment skills (Benner, 2001). Each stage of the Benner Model, from novice to expert, possesses its own unique qualities and characteristics that demonstrate a continuum of learning and development. For the nurse newly working in the field, responding to diverse and often demanding situations builds competence and fosters progression through the stages of from Novice to Expert.

Nurse Competence Scale

Brenner's Novice to Expert theory was used in the development of the Nurse Competence Scale. Panels of experts identified duties related to the role of the professional nurse. These role related responsibilities were compared and narrowed down to 75.

The Nurse Competence Scale contains 75 questions divided into seven categories consisting of Helping role, Diagnostic Functions, Teaching/coaching, Managing situations, Ensuring quality, Therapeutic interventions, and Work role. Although each category is related to nursing competence, the categories help further detail qualities of nursing competence. All categories are weighted equally and once completed, an overall competence score is determined. The belief is the nurse receiving a higher competence score has progressed further on the Novice to Expert continuum than a nurse who has a lower competence score.

3 Research Procedures

3.1 Design

A mixed method approach was used, including quantitative analysis of survey questions and interviews with participants, to examine nursing teacher views on items critical to practice on the Nurse Competence Scale. Quantitative results are reported in this paper. A survey link was sent out to nursing teachers via email. Copyright and IRB approval was granted for the study.

To ensure the protection of human subjects, Institutional Review Board approval was sought. All participants were sent an email with a description of the study and a link

to the survey. Prior to completing the survey all participants were given a consent page, once agreeing to participate in the study, the participant was linked to the survey. The researcher did not disclose data to participants; once surveys were completed, participants ($n=20$) were unable to view overall survey results. Statistical analysis was conducted using the SPSS software package.

3.2 Sample

A purposeful sample of nursing teachers ($n=20$) at a state college in Florida; state and community colleges offer associate degree programs in nursing, a nationally accepted educational pathway into the workforce in the United States. The study required an expert panel to examine the content on the NCS. Nursing teachers were selected as the sample population due to their years of experience in nursing and advanced education and depended on subject willingness to participate in the study. Faculty possess knowledge and experience in their respected fields that leads to a deep understanding of the role of the nurse. Recent teaching experience prepares faculty to critically examine fundamental aspects of nursing pertinent to basic competencies. This expertise gives faculty the unique capacity to offer perspectives on nursing research as well as the skills and experience needed to be successful in the workforce.

The selected state college in central Florida is accredited by the Accreditation Commission for Education in Nursing (ACEN). Full-time faculty members were recruited from an associate degree program meeting the criteria established by ACEN.

No participants meeting criteria were excluded based on demographic factors. Demographically, the samples consisted primarily of females (95%) and were Caucasian (75%); Asian (5%) and Hispanic (20%) (M. Morgan, personal communication, August 19, 2016).

3.3 Instrument

The Nurse Competence Scale (NCS) was designed as a self-measurement tool to evaluate nursing competence. Originally developed in Finland, the NCS has been used in over 25 different countries (Meretoja, Isoaho, & Leino-Kilpi, 2004; O'Leary, 2012; Wangenstein, Johansson, Bjorkstrom, & Nordström, 2012).

The NCS consists of 75 statements divided into seven overarching categories that include: (1) the helping role, (2) teaching-coaching, (3) diagnostic function, (4) managing situations, (5) therapeutic interventions, (6) ensuring quality, and (7) work role.

The critical-to-practice, scale was included in the survey sent to nursing teachers. The critical-to-practice scale focuses on participants' opinions on the importance of each item on the NCS. This scale ranges from one (indicating the item is not critical to nursing practice), two (indicating the item is somewhat critical to practice), and three (indicating the item is very critical to practice).

4 Results

The highest rated item on the Critical to Practice Scale was *Acting appropriately in life-threatening situations* (M=3.00, SD=0.00, Table 1). The lowest rated item was *Contributing to further development of multidisciplinary clinical paths* (M=2.10, SD=0.72) in the Therapeutic Interventions category.

Participants reported the most critical to practice items in The Teaching-Coaching category was *Acting autonomously in guiding family members* (M=2.30, SD=0.57). The highest rated item in the Diagnostic Functions category in the Critical to Practice Scale on the NCS was *Developing documentation of patient care* (M=2.79, SD 0.42).

Table 1: Critical to Practice Scale: Managing Situations

Items in the Managing Situations Category of the NCS	M	SD
Acting appropriately in life-threatening situations	3.00	0.00
Able to recognize situations posing a threat to life early	2.90	0.45
Promoting flexible team co-operation in rapidly changing situations	2.75	0.44
Prioritizing my activities flexibly according to changing situations	2.75	0.55
Planning care consistently with resources available	2.70	0.47
Coaching other team members in mastering rapidly changing situations	2.65	0.49
Keeping nursing care equipment in good condition	2.55	0.69
Arranging debriefing sessions for the care team when needed	2.40	0.75

Note: N=20. Results for the Managing Situations Category on the NCS
3=very critical to practice, 2=somewhat critical to practice, 1=not critical to practice

The Helping Role category contained the second highest item on the Critical to Practice Scale *Planning care according to individual needs* (M=2.95, SD= 0.22, Table 2). Just after this item in the Helping Role category in the Critical to Practice Scale was *Modifying the care plan according to individual needs* (M=2.90, SD=0.31).

Table 2: Critical to Practice Scale: Helping Role

Results for the Helping Role Category of the NCS	M	SD
Planning patient care according to individual needs	2.95	0.22
Supporting patients' coping strategies	2.70	0.47
Evaluating critically own philosophy in nursing	2.40	0.75
Modifying the care plan according to individual needs	2.90	0.31
Utilizing nursing research findings in relationships with patients	2.80	0.52
Developing the treatment culture of my unit	2.60	0.60
Decision-making guided by ethical values	2.85	0.37

Note: N=20. Results for the Helping Role category on the NCS

3=very critical to practice, 2=somewhat critical to practice, 1=not critical to practice

5 Conclusions

There are varying definitions of competence and what it means to be competent. In this study, experts determined different areas of nursing practice require different knowledge and skill sets. While nursing is a constantly evolving practice, the priority for health care professionals, stakeholders, accreditation agencies and professional organizations is safe quality care. This is the essence of competence in adapting and constantly evolving in knowledge and skills.

Evaluating each item on the NCS using the critical to practice scale provides insight to the necessary skills and knowledge needed to be competent in nursing. The item ranked most critical to practice, *Acting appropriate in life threatening situations*, underscores the importance of nursing competence and validates inclusion of the item on the NCS. Further, the inclusion of *Developing documentation of patient care* as one of the items that ranked most critical to practice is a basic skill taught in schools nationwide.

Frequently used items are necessary for practice and, therefore, represent abilities a competent nurse should demonstrate. The mean of the Critical to Practice scale was reported for each of the seven categories of the NCS based on results from surveyed teacher. Teacher identified life-saving and imminent decision making as most critical to practice, which is consistent with professional standards in practice. The three items that ranked the lowest on the Critical to Practice scale were related to an organizations workplace environment and recognizing a colleagues need for assistance.

Curricular components of nursing programs must be relevant to current nursing practice in order to prepare students to enter the workforce. Using the items on the NCS, schools of nursing may establish curricular components that are relevant to practice. Establishing relevancy to practice in schools of nursing helps to narrow the focus of the curriculum to critical knowledge and skills. Currently many schools of nursing suffer

from too much content and often struggle what content to delete (Benner, Sutphen, Leonard, & Day, 2010). This survey may act as a guide to reform curriculum by helping nurse educators determine which information to delete from the current content laden curriculum. In addition items on the NCS may be compared to current curricular and accreditation standards to help establish key content areas of the nursing curriculum.

Thus registered nurses can reflect on their own practice and adjust their approach to the workforce, further enhancing competence (Meretoja, Isoaho, & Leino-Kilpi, 2004). Nurses spend the most amount of time with patients (Aiken et al., 2012) and must work in a variety of different settings. Current standards of practice from professional organizations are obscure and difficult to measure. The current nursing shortage combined with the estimated number of nurses that will be retiring in the upcoming years, will require new nurses to enter the workforce. The new nurses and all nurses must be competent in their care to ensure the best patients outcomes and the safest care possible.

The sample for this study was restricted to individuals who were employed as a nursing teacher member. Diversity within the sample was limited to full-time nursing teacher at a state college. Although nationwide associate degree programs reflect race and ethnicities within the nursing workforce, generalizability of the results may not be applicable to all nursing students (National League for Nursing, 2012). This study used a self-reported questionnaire and is limited by the accuracy of participants' responses. However, the results of this study can guide the further research where nursing students, graduates and employees could be included as participants. Further research is also needed to explore other ways to bridge the academic-practice gap. Studies involving bedside nurses would provide a direct link to practice and allow for comparison between nurse educators and bedside nurses.

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